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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

JAN 7 1993 FCC - MAIL ROOM

In the Matter of	)	
Amendment of Section 73.202	)	MM Docket No.
FM Table of Assignments	ý	RM
(Colonial Heights, Tennessee)	)	RECEIVED

To: Chief, Policy and Rules Division

JAN - 7 1993

# PETITION FOR RULEMAKING

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

Murray Communications, permitee (File No. BPH-900220MM) of a new FM station to operate on Channel 290A at Colonial Heights, Tennessee, by counsel, pursuant to Section 1.401 of the Commission's Rules, herewith submits its Petition for Rulemaking, respectfully requesting the Commission to substitute FM Channel 290C3 for 290A at Colonial Heights, Tennessee, thereby amending Section 73.202 of the Commission's Rules, FM Table of Assignment, as follows:

City			Channel	No.
Colonial	Heights	Tennessee	20	 90C3

In support whereof the following is shown:

1. As reflected in the attached Technical Report, prepared by Charles M. Anderson, the substitution of FM Channel 290C3 for 290A at Colonial Heights, Tennessee, can be made in full compliance with all applicable minimum mileage separation and

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other technical requirements under the Commission's Rules.

Further, the requested assignment can be made without requiring additional changes or substitutions in the FM Table of Assignments and without conflict to any other known proposed rulemaking.

- 2. The substitution of Channel 290C3 for 290A at Colonial Heights, Tennessee, will provide that community and the surrounding area with improved FM service, reflected in a gain in primary service area of 2,117 square kilometers and a gain in population (within the primary service area) of 61,185 persons. Upon issuance of an Order, implementing the requested Channel substitution, Murray Communications will promptly prepare and file the necessary application with the Commission and, having obtained authorization to do so, will promptly construct the facilities requested.
- 3. Therefore, inasmuch as the proposed Channel substitution would allow for improved FM service and can be implemented in compliance with Commission Rules, Murray Communications urges the Commission to promptly issue a Notice of Proposed Rulemaking, looking toward the implementation of the Channel substitution, requested herein.

WHEREFORE, for the foregoing reasons, the Commission should amend Section 73.202 of its Rules by substituting FM Channel 290C3 for 290A at Colonial Heights, Tennessee, and should modify the facilities currently authorized in Murray Communications' Construction Permit (File No. BPH-900220MM) to specify operation

on 290C3.

Respectfully Submitted,

MURRAY COMMUNICATIONS

Timothy K. Brady

Its Attorney

P.O. Box 986 Brentwood, TN 37027-0986 (615) 371-9367

January 7, 1993

# TECHNICAL REPORT

## MURRAY COMMUNICATIONS

Requests:

UPGRADE OF AUTHORIZED CLASS 290A FACILITY TO 290C3 (105.9 MHZ)

COLONIAL HEIGHTS, TENNESSEE

**DECEMBER 27, 1992** 

CHARLES M. ANDERSON BROADCAST CONSULTANT 1519 EUCLID AVENUE (502)781-2067

#### CONTENTS

Discussion1
Allocation summary
E-1 Allocation study6
E-1A Allocation plot7
E-2 Area to locate 290C38
E-3 City grade - 70 dBu coverage9
E-4 Terrain plot to Colonial Heights10
Certification11

Disclaimer: Charles M. Anderson assumes no liability for any errors or omissions in the information, exhibits and report provided herein; and, shall not be liable for any injuries or damages (including consequential) which might result from use of said information, exhibits and report.

Filing of this report with the Federal Communications Commission constitutes acceptance in full of the terms and conditions stated above.

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#### TECHNICAL REPORT

This technical report has been developed on behalf of Murray Communications, permittee of a new FM facility at Colonial Heights, TN (BPH-900220MM) on channel 290A, in support of a petition for rulemaking requesting an on-channel upgrade from 290A to 290C3 (105.9 mHz). The upgrade may be accomplished without any other changes in the table of allocations, and is consistent with all pending applications and rulemakings.

I.

#### 290C3 UPGRADE ALLOCATION ANALYSIS

Upgrade of the Colonial Heights, TN 290A facility to 290C3 is proposed at arbitrary reference point:

#### N 36-21-11 W 82-35-24

The reference point is located 16.7 km at an azimuth of 210.7 degrees true from the Colonial Heights reference point (N 36-28-56 W 82-29-40). An allocation study included as Exhibit E-1 demonstrates that the proposed upgrade meets Section 73.207 clearances to all existing applications and protected rulemakings. The arbitrary reference point is located within the intersecting arcs from the closest relevant facilities (see E-1A) to minimize the distance from the community of allocation. However, Exhibit E-2 depicts

the substantial area within which a 290C3 site may be selected meeting separation criteria while extending a 70 dBu contour over the Colonial Heights community.

The proposed upgrade will easily encompass the entire city of Colonial Heights with a 70 dBu contour. Exhibit E-3 depicts the 70 dBu from the reference point. The contour is based on terrain obtained from the N.G.D.C. 30 second database, and has been calculated and plotted on each of 36 equally spaced radials. Contour distances were derived from a computer program which utilizes the Commissions Section 73.333 data points and F50,50 algorithm.

Line of sight from the arbitrary 290C3 reference point to Colonial Heights (N 36-28-56 W 82-29-40) along azimuth 24.7 degrees True is demonstrated in a terrain plot included as Exhibit E-4. A radiation center of 762 meters AMSL was assumed in preparation of the the exhibit. Terrain data were obtained at .1 mile intervals along the 24.7 degree azimuth from the Leesburg, Sullivan Gardens and Boone Dam 7.5 minute topographic maps.

#### II.

#### POPULATION AND AREA GAINS

The area and population (1990 Census) served by the 290C3 upgrade has been determined utilizing the Communications Data Services population program. The 60 dBu

contour was based on the HAAT for eight evenly spaced radials obtained from the N.G.D.C. 30 second database and calculated utilizing the Commission's F50,50 algorithm and 73.333 data points. A maximum 25 kW/ 100 meters HAAT facility was assumed for all calculations.

The 290C3 population and area were compared to the authorized Colonial Heights 290A parameters obtained from the 290A application. A total population of 334,325 and area of 4,723 square kilometers will be served within the upgraded 60 dBu. This represents a population increase of 61,185 (+22.4%), and a service area increase of 2,117 sq km (+123%) over the authorized class A facility.

#### III.

#### **CONCLUSION**

The proposed upgrade of the authorized 290A facility at Colonial Heights, TN to 290C3 will yield substantial public interest benefits. It will provide the community with its first wide area FM service. Furthermore, it will increase the facility's 60 dBu service area by 2,117 sq km (+123%) including an additional population of 61,185.

The upgrade is cochannel and clearly mutually exclusive with the authorized facility. Therefore, no competing expressions of interest are permissible under the Commission's upgrade rules.

It is concluded that the upgrade of the authorized 290A facility at Colonial Heights, TN to 290C3 can be accomplished in full compliance with the Commission's allocations rules and policies.

# ALLOCATION SUMMARY

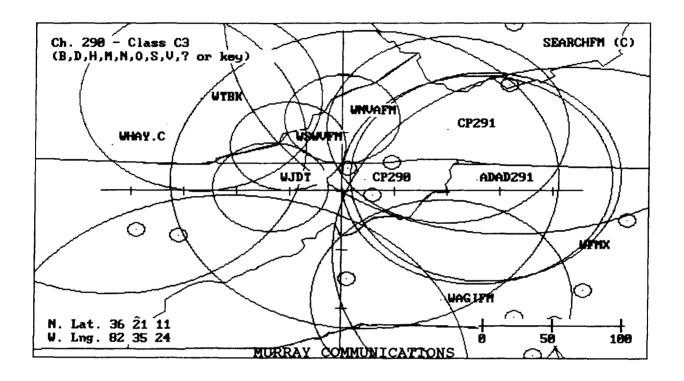
City	Present	Proposed	Coordinates
Colonial Heights, TN	290A	290C3	N 36-21-11 W 82-35-24
			16.7 km SW

# EXHIBIT E-1

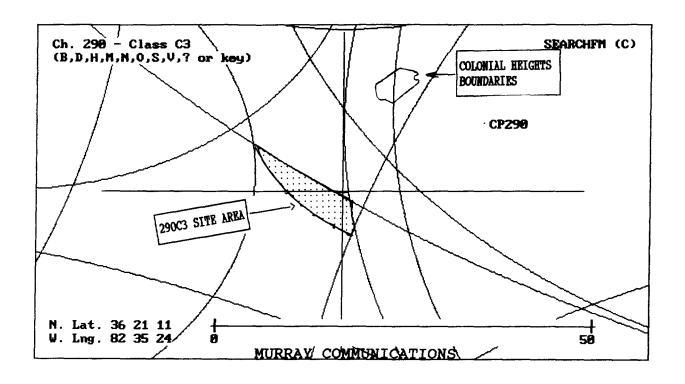
## MURRAY COMMUNICATIONS

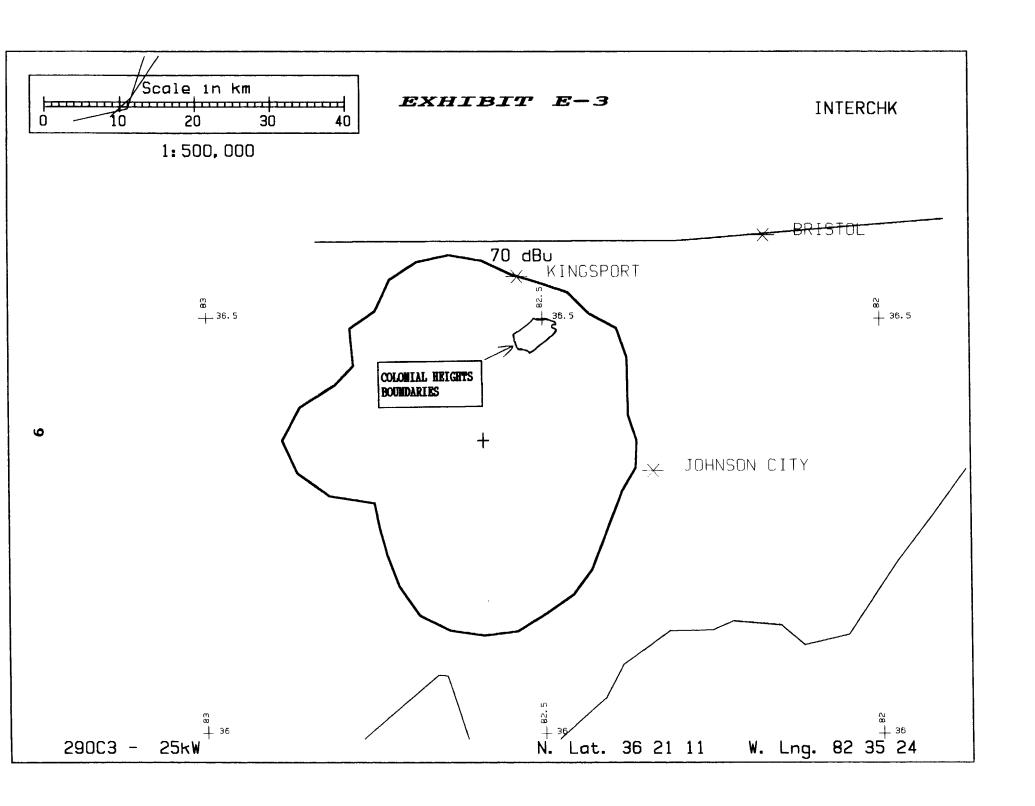
REFERENCE 36 21 11 N 82 35 24 W			CLASS C3 Current rules spacings CHANNEL 290 -105.9 MHz				DISPLAY DATES DATA 09-30-92 SEARCH 12-26-92				
	CALL	CH#	CITY			STATE	BEAR'	D-KM	R-KM	MARGIN	1
	CP290 WTNJ AD291 WFMX AD291 DE291 CP291 WJDT WSWVFM WLET	290A 290B 291C3 289C 291C3 291A 291A 293A 288A	Mount Ho Jefferso Statesvi Jefferso Saltvill Saltvill Rogersvi Penningt	on .lle on .e .e .lle		TN WV NC NC NC VA VA TN	57.2 36.1 83.8 108.8 82.7 52.9 52.9 273.3 316.2	210.59 99.86 179.46 106.11 96.53 96.53 53.02 58.56	211.0 99.0 176.0 99.0 89.0 89.0 42.0 42.0	3.46 7.11 7.53 7.53 11.02 16.56	*
	WNVAFM WAGIFM WHAY.C WTBK	291C 292A 287C 290A 289A	Toccoa Norton Gaffney Whitley Manchest			GA VA SC KY KY	204.4 0.1 144.7 284.4 310.4	197.82 68.03 127.16 174.44 136.32	42.0 96.0	21.82 26.03 31.16 32.44 47.32	

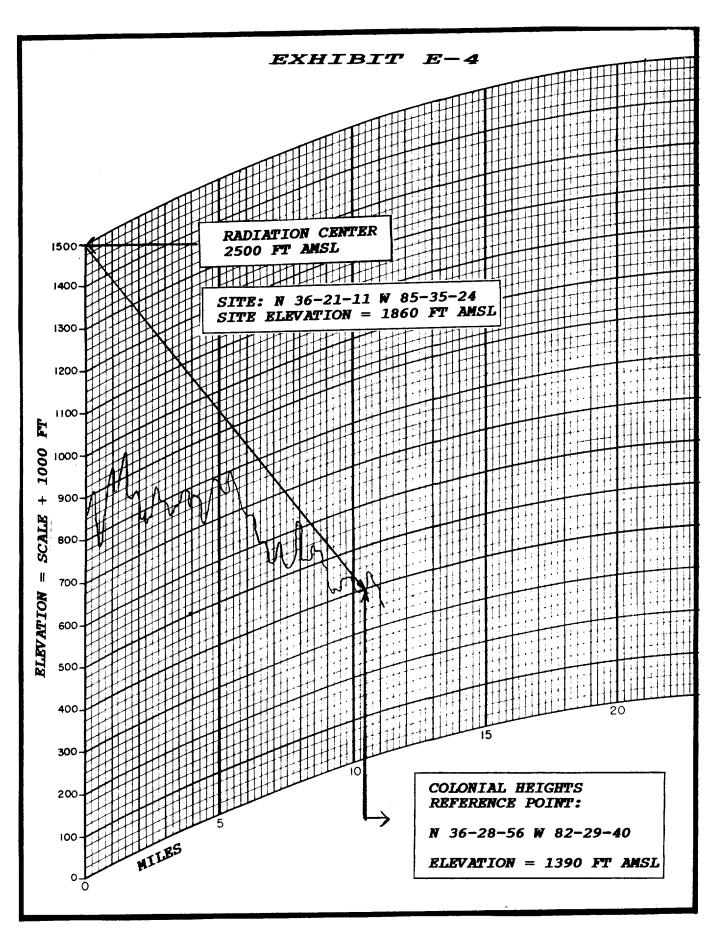
# EXHIBIT E-1A



# EXHIBIT E-2







#### CERTIFICATION

Charles M. Anderson hereby certifies that;

His qualifications in broadcast allocation matters are a matter of record before the Federal Communications Commission having been presented and accepted on many occasions in the past;

That he holds a lifetime General Radiotelephone license(#PG-6-7352), a bachelors degree in the physical sciences from Western Kentucky University and advanced degrees in the communications field from the University of North Carolina and Indiana University;

That the accompanying technical report and exhibits were developed by him personally or under his immediate supervision and that all the information presented therein is true and correct to the best of his knowledge and belief.

Charles M Anderson

December 27, 1992